

Application No. 09/557,696

REMARKS

Claims 1-14, 39-52 and 58-68 are pending. By this Amendment, claims 45-47, 49 and 50 are amended for clarity. No new matter is introduced by the amendments.

Applicants acknowledge the allowability of claims 6, 7, 40, 41, 61 and 66, which are objected to for depending from a rejected claim. Claims 45 and 46 are free of the cited references.

Rejections Under 35 U.S.C. § 112

The Examiner rejected claims 45-47, 49 and 50 under 35 U.S.C. § 112, second paragraph as being indefinite. With all due respect, as an initial point, Applicants are surprised that the claims, which have been in prosecution for some time and have been previously allowed and ready to issue, are now deemed indefinite. The Examiner asserted that certain claimed features lacked antecedent basis. Applicants maintain that the claims as written are abundantly clear since the features were clearly inherently present as initially drafted. Nevertheless, to advance prosecution, Applicants have amended the claims for clarity.

With respect to claim 45, Applicants note that the crystal structure of a liquid or gas can be evaluated, but it would be always found lacking. Nevertheless, Applicants have noted that the products are solids with a solid structure. For the evaluation of any phase of material solid or not, the evaluation of the crystal structure can lead to a conclusion that a crystal structure is lacking, i.e., that the material is amorphous or otherwise does not have any long range order.

Applicants have amended claims 46, 47, 49 and 50 to address the Examiner's concerns. In view of the amendments, the claims are clearly definite. Applicants respectfully request withdrawal of the rejection of claims 45-47, 49 and 50 under 35 U.S.C. § 112, second paragraph as being indefinite.

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Rejection Over Palmer et al.

The Examiner rejected claims 1-5, 10-14, 39, 42-44, 47, 48, 51, 52, 58-60, 62-65, 67 and 68 under 35 U.S.C. § 102(a) as being unpatentable over WO 99/30817 to Palmer et al. (the Palmer application). The Examiner asserts that the Palmer application teaches all of the features of Applicants' claimed invention. With all due respect, Applicants assert that the Palmer application falls far short of describing Applicants' claimed invention. In particular, the Palmer application does not teach a reaction within a flow. Thus, the Palmer patent does not render Applicants' invention prima facie anticipated. Applicants respectfully request reconsideration of the rejections based on the following comments.

The Palmer application teaches reactions in a fixed vessel. Thus, its disclosure is similar to the disclosure in U.S. 6,254,826 to Acosta, which was overcome in earlier prosecution. With respect to the Palmer application, the reactants are injected into fixed reaction cartridges 4. Referring to Fig. 2 of the Palmer application, the reactions take place in these stirred reactors and not in a flow through a reaction chamber. In contrast, Applicants' claimed invention is directed to reactions that take place within a flow through a reaction chamber. Thus, the Palmer patent does not teach the reaction steps of Applicants' claims. During the reaction process, the Palmer patent is explicit that the reaction does not take place in a flow. In particular, the Palmer application at page 10, lines 5-8 (emphasis added) states the "outlet port of the reaction chamber is separate from the inlet and contains a barrier (e.g. a membrane filter) to prevent the flow of the solid phase beads onto which the combinatorially synthesized compounds are attached when synthesized."

With respect to claim 1 and claims depending there from, the Palmer patent also clearly does not teach moving a reactor inlet nozzle as claimed. Furthermore, with respect to claim 64 and claims depending from claim 64, the Palmer patent does not disclose synthesis of a

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plurality of reaction products sequentially in the same reaction chamber while the reaction chamber remains isolated from the ambient environment.

In summary, the Palmer patent discloses a reaction process that is dramatically different from Applicants' claimed process. The Palmer patent teaches reactions in a stirred cartridge in contrast to a reaction within a flow. Since the Palmer patent does not teach or suggest all of the elements of Applicants' claimed invention, the Palmer patent clearly does not prima facie anticipate Applicants' claimed invention. Applicants respectfully request withdrawal of the rejection of claims 1-5, 10-14, 39, 42-44, 47, 48, 51, 52, 58-60, 62-65, 67 and 68 under 35 U.S.C. § 102(a) as being unpatentable over WO 99/30817 to Palmer et al. (the Palmer application).

Rejection Over Palmer et al and Garner et al.

The Examiner rejected claims 8 and 9 under 35 U.S.C. § 103(a) as being unpatentable over the Palmer application as applied above, and further in view of WO 00/00312 to Gardner et al. (the Gardner application). I note that this Gardner PCT application corresponds with issued U.S. Patent 6,270,732. With all due respect, there is no motivation to combine the references, the combination does not lead to Applicants' claimed invention and the Gardner patent teaches away from the present invention. The combined teachings of the Palmer application and the Gardner patent clearly do not render Applicants' invention prima facie obvious. Applicants respectfully request reconsideration of the rejection based on the following comments.

The deficiencies of the Palmer application were discussed in detail above. As noted above, the Palmer application does not teach reaction in a flow. In contrast, the Gardner patent teaches reaction in a flow. Similar issues were discussed in relationship to the Marsh patent and the Acosta patent in Applicants' Appeal Brief of June 18, 2004. The Gardner

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application is directed toward the formation of inorganic particles in a flow while the Palmer application is directed to organic reactions performed in an organic solvent. There is no similarity with respect to the approaches, objectives, apparatuses taught in the two applications. Thus, there simply is no motivation for the combination and no teachings how to combine these wildly different teachings. Also, the Gardner patent is directed to combining the products from different reactive flows in contrast to the present claims that are directed to separate collection. Thus, the Gardner application teaches away from the present claims.

The Palmer application and the Gardner application alone or together do not teach or suggest the reaction in a flow to form two distinct products that are separately collected as disclosed and claimed by Applicants. For all of the reasons above, the combined teachings of the Palmer application and the Gardner application fall far, far short of rendering Applicants' claimed invention prima facie obvious. Applicants respectfully request withdrawal of the rejection of claims 8 and 9 under 35 U.S.C. § 103(a) as being unpatentable over the Palmer application as applied above, and further in view of the Gardner application.

CONCLUSIONS

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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